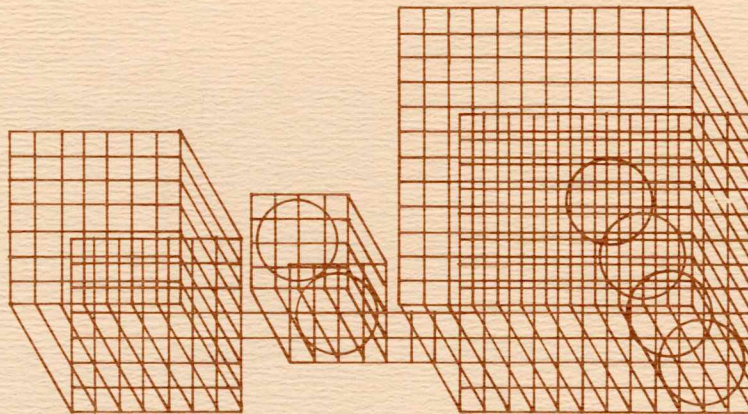




THE CENTRE FOR BUILDING STUDIES MONTREAL, QUE.



announces a
SHORT COURSE
JANUARY 17-18, 1979

ENERGY CONSERVATION AND BUILDING ENCLOSURE DESIGN

LOCATION:

Centre for Building Studies
1249 Guy St. Montréal, Québec.

The energy crisis is causing a flood of new standards, materials, special interest promotion and client requirements for the design of building enclosures. To help guide design professionals to an understanding of this important field, an intensive 2 day course will be given by the staff of the Centre for Building Studies and guest speakers.

They will present a rational balanced approach to summarize the latest information and present design aids that can be used now and in the future. Special emphasis will be given to the interaction of materials, energy standards and building economics. Practical problems in assembling building components will be considered in a case study. The effects of design alternatives will be simulated.

WHO SHOULD ATTEND AND WHY

The course is intended for those who need up-to-date, reliable information on building enclosures, i.e.

- architects and engineers** who require knowledge of good energy conservation practices and materials.
- commercial building owners and property managers** who need to know the operating and capital cost implications of conservation measures in building programs.
- government administrators and code enforcement officials** preparing for new building codes, reviewing and assessing proposals for governmental support.
- architectural and engineering faculty** who want to understand the implications of energy conservation and are interested in future trends.

An understanding of the basic principles of heat transfer, condensation and wall design will be assumed for all participants.

PROGRAMME

January 17

- 0815 Registration
- 0900 Introduction
- 0915 Guest Speaker - Dr. Hutcheon - functional requirements, designers' tasks
- 1000 Importance of enclosure design on energy consumption - Mr. Turaga
- 1030 Coffee break
- 1045 Mechanisms of heat gain and loss - Dr. Guy
- 1130 Thermal bridges, air infiltration, ventilation, condensation - Dr. Homma
- 1215 Lunch
- 1345 Enclosure materials - Mr. Low
- 1430 Insulation materials - Mr. Low
- 1515 Coffee break
- 1530 Guest speaker - Mr. Perrault - practical problems posed by an enclosure assembly
- 1700 Tour of the Centre
- 1730 Cocktail Party

January 18

- 0900 Solar energy effects - passive heating - Dr. Shapiro
- 1030 Coffee break
- 1045 Energy standards and codes - Measures for Energy Conservation in New Buildings, ASHRAE 90-75 - Mr. White
- 1115 Life cycle costing and energy efficient enclosure design - Dr. Russell
- 1145 Design methods - strategies for energy savings in schematic and detailed design stages - Mr. White
- 1215 Lunch
- 1345 Case studies - Guest Speaker - Mr. Brand - a medium-size project will be worked up from schematic to detailed design
- 1700 Course finished

COURSE NOTES

An extensive series of course materials will be assembled for each participant. Included will be published reports, energy standards, articles and lecture notes. These references will be selected to form the nucleus of an up-to-date design file for the practising professional.

LANGUAGE

The language of the course will be English.

OTHER SHORT COURSE TITLES (TENTATIVE)

15-16
Applications of Control Systems and
Automation to Building Energy
Conservation (Mid-February)

Life Cycle Costing and Building
Design (Mid-March)

Controlling Noise in Industry
(Mid-April)

INVITED SPEAKERS

- Neil Hutcheon, Ph.D.

One of the major pioneers in building science in Canada, a former director of the Division of Building Research of the N.R.C., Dr. Hutcheon has conducted fundamental research into areas of building engineering. He has received ASHRAE's Distinguished Service Award and is a Fellow of the Engineering Institute of Canada.
- J. Claude Perrault

A wealth of practical experience as a building technologist with Poole Construction Co. of Edmonton, Alberta has given M. Perrault expertise in trouble shooting and solving difficult enclosure problems. He is currently on the steering committee of the Division of Building Research of the N.R.C.
- Ron Brand, B. Arch.

In addition to teaching architecture at Carleton University, Mr. Brand is currently preparing a systematic study of enclosure detail design problems. He has 20 years experience in private practice and has been a consultant to the Government studying condensation problems in the Lorne Building (the National Gallery).

SHORT COURSE STAFF FROM CENTRE FOR BUILDING STUDIES

- Richard Guy, Ph.D.

Involved in all aspects of basic building science Dr. Guy's special research interests are in acoustics and vibration analysis.
- Hiroshi Homma, Tekn. Dr.

Experience in Canada, Sweden and Japan has given Dr. Homma a special interest in the problems of cold climates particularly in the areas of thermal comfort, ventilation and air infiltration.
- Norman M.P. Low, M. Sc.

A specialist in materials and instrumentation, Mr. Low is currently active in the research and development of efficient insulating materials from industrial waste products and raw minerals. He has broad practical background in several Canadian industries dealing with construction and building materials.
- Alan Russell, Ph.D.

In addition to his duties as Associate Director of the Centre for Building Studies Dr. Russell has special expertise in building economics and construction management. His current interests include coordinated building design and management information systems for the medium size contractor.
- Marvin Shapiro, Ph.D.

A physicist, Dr. Shapiro has participated in design and performance studies for a solar heated house which uses a vertical flat plate collector. Current research is in developing low cost phase change heat storage devices and passive solar heating, solar water heaters and new glazing systems.
- Mal Turaga, M.S.

Actively engaged in teaching and research Mr. Turaga has also had extensive industrial experience. His current interests are the performance evaluation of building thermal systems and components, total energy systems and computerized load and energy systems analyses.
- Robert White, M. Arch.

An architect, Mr. White has had considerable experience in North America and abroad. Present interests include large atria spaces and mixed use projects.

- REGISTRATION

Fee - \$275.00 - Pre-registration is essential and must be received on or before January 8th, 1979. Registration will be limited and includes: Seminar Material, Lunches, Coffee, Cocktail Party. If more than one participant from the same company registers the fee for the other participant will be \$245.00

- ACCOMMODATION

Hotel accommodations can be arranged for out-of-town participants at the Sheraton-Mount Royal Hotel at the rates of: \$26.75 - single. \$33.75 - double.

For further information, please contact: Doreen Bates, Centre for Continuing Education at 879-8436.

Receipts for income tax purposes will be provided.

The Centre for Continuing Education and the Centre for Building Studies reserve the right to cancel due to insufficient registration. In this case, fees will be refunded.

- SPONSORS

The Centre for Building Studies & The Centre for Continuing Ed.
- COORDINATOR FOR C.B.S.

Mr. Robert White.